Conclusion: Parenchymal loss occurs in 31% of patients and is associated with markers of impaired parenchymal perfusion (RI and GSG) at the time of intervention. Pre-existing renal size or volumes were not predictive of parenchymal loss. Parenchymal loss is associated with a significant decrease in survival and a marked increased renal related morbidity and progression to hemodialysis. Monitoring parenchymal loss will identify high-risk patients after renal intervention.

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SS9.

Successful Management of Acute Complicated Type B Dissections with TEVAR and Adjunctive Endovascular Techniques: Malperfusion Versus Rupture

Elena Y. Rakhlin, Wilson Y. Szeto, Ronald M. Fairman, Benjamin M. Jackson, G. William Moser, Edward Y. Woo. Hospital of University of Pennsylvania, Philadelphia, PA

Objective: Complicated acute type B aortic dissections require urgent intervention. Our group has previously reported successful treatment of this condition with TEVAR. We report our continued experience, and contrast the technical aspects and outcomes of malperfusion vs. rupture.

Methods: From 2004-2008, 43 patients (60 ± 13 years; 28 men) with an acute complicated type B dissection underwent TEVAR. Indications for treatment were malperfusion - 26 (60%) and rupture - 22 (51%); 5 (11%) presented with both. Renal malperfusion was present in 17 (65%), visceral - 17 (65%), lower extremity - 14 (54%). Patients were followed 1 to 49 months (16 ± 12).

Results: Excellent technical and clinical results were achieved in both groups. Onset of intervention was significantly earlier in patients with rupture (0.6 vs. 1.9 days, p=0.02). Endograft utilization and deployment were comparable, including device number (2.1; 2.2; p=0.94), left SCA coverage (17; 16; p=0.58), and celiac coverage (0; 0). One-year survival was greater than 94% in both groups. While length of stay was longer with malperfusion, neither presentation conferred an inferior outcome (Table). Although TEVAR alone effectively treated aortic rupture in 21 patients (95%), malperfusion was rectified in only 15 (58%) cases. Eleven patients (42%) required adjunctive procedures to restore end-organ perfusion: 50% -lower extremity, 18% - renal, 12% - visceral. No patient suffered limb loss or bowel resection; renal function recovered in 94% of patients with malperfusion.

Conclusions: Malperfusion and rupture complicating acute type B aortic dissection are both successfully managed with TEVAR. However, the endovascular strategy must be customized to each presentation to achieve these results. While TEVAR alone is sufficient to address the aortic disruption in patients with rupture, adjunctive procedures are often necessary in malperfusion cases.

	Malperfusion	*Rupture*	*P value*
ICU stay (days)	5.1 ± 0.8	6.4 ± 0.8	0.98
LOS (days)	19.6 ± 2.5	13.2 ± 1.2	0.04
Blood products (patients)	15/26	9/22	0.59
Stroke (patients)	0/26	1/22	0.93
Spinal ischemia (patients)	2/26	1/22	0.65
30-day mortality (patients)	0/26	1/22	0.93
1-year survival (patients)	21/22	16/17	0.85

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SS10.

Temporary IVC Filters Usually Become Permanent Except When Placed in Trauma Patients for Prophylactic Indications

Peter B Brant-Zawadzki, Faheem Akhtar, Michelle T Mueller, Daniel V Kinikini, Larry W Kraiss, Mark R Sarfati. University of Utah, Salt Lake City, UT

Objective(s): The optimal use of retrievable IVC filters remains unclear. We compared our recent 5-year experience with retrievable filters placed for prophylactic or therapeutic indications.

Methods: A retrospective, single institution chart review was performed to identify patients who had a retrievable filter placed between July 2002 and December 2007. Patient data included age, sex, admitting diagnosis, indication for filter, dates of insertion, retrieval/attempted retrieval and reasons for unsuccessful retrieval. Comparisons were made by Chi-square testing.

Results: During the study period, 462 retrievable filters were placed in patients who had a confirmed diagnosis of VTE (or were considered high risk for VTE) who also had an absolute or relative contraindication to anticoagulation. Overall, a retrieval attempt was made in 201 (44%) patients and was successful in 174 (87% of attempts but only 38% of all filters placed) [See table]. Retrieval was much more likely to be attempted in patients who received filters for prophylactic (64%) v therapeutic (28%) indications ($p < 0.0001$). Lack of an attempt to retrieve the filter was due to loss of follow-up (n = 141; no difference between prophylactic or therapeutic groups), contraindication to anticoagulation (n = 75), or patient death (n = 46). Retrieval failure (n = 27) was due to: filter ingrowth (n = 11), retained thrombus (n = 10), or tilt (n = 6). Duration of implantation >30 days was strongly and inversely correlated with retrieval success [<30 day retrieval rate = 92% (131/142), >30 day retrieval rate = 73% (43/59); p = 0.0002].

Conclusions: The only group with a >50% retrieval rate were trauma patients who received prophylactic filters. All other patient groups were more likely to have their filters left in permanently. If attempted, retrieval rates were relatively high regardless of indication or underlying diagnosis although duration of implantation was a significant factor in unsuccessful filter retrieval.

Comparison between Prophylactic & Therapeutic Filters

	Prophylactic (no confirmed VTE)	*Therapeutic (confirmed VTE)*
N [Total = 462] (%)	194 (42)	268 (58)
Attempted Retrieval (%)	125 (64)	76 (28)
Successful Retrieval (% of attempts)	111 (89)	63 (84)
Retrieval Rate (%) by Diagnosis		
Trauma (n = 114/188, 61%)	98/150 (65)	16/38 (42)
Cancer (n = 10/85, 12%)	1/10 (10)	9/75 (12)
Neuro (n = 6/34, 18%)	3/8 (38)	3/26 (12)
Ortho (n = 11/32, 34%)	4/13 (31)	7/19 (37)
Other Med/Surg (n = 33/123, 27%)	5/13 (38)	28/110 (25)

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SS11.

Aggressive Lipid-Lowering is More Effective Than Moderate Lipid-Lowering Treatment in Carotid Plaque Stabilization

Nikolaos P E Kadoglou[1], Nikolaos Sailer[1], Anestis Moumtzouoglou[1], Alkistis Kapelouzou[2], Grigorios Fotiadis[1], Ioulia Vitta[1], Ioannis Kakisis[3], Efthimios Avgerinos[3], Thomas Gerasimidis[1], Panayotis Karayannacos[2], Christos D Liapis[1]. [1]Aristotle's University of Thessaloniki, Thessaloniki, Greece; [2]Foundation of Biomedical Research, Academy of Athens, Athens, Greece; [3]University of Athens, Athens, Greece

Objective: Atherosclerotic plaque stabilization is a promising strategy to prevent cerebrovascular events in patients with moderate carotid stenosis. This prospective study examined whether intensive lipid-lowering therapy is more effective in increasing carotid plaque echogenicity, assessed by Gray-Scale Median (GSM) score, and suppressing serum levels of osteopontin (OPN) and osteoprotegerin (OPG) in patients with carotid stenosis.

Methods: 120 patients (51M/69F), aged 55-75, with carotid stenosis (NASCET: 40-60% for symptomatic and 40-70% for asymptomatic patients), thus without indications for surgical intervention, were included. Patients with previous use of statins were excluded. Patients were randomized to either intensive lipid-lowering therapy (Group A; n=60: target LDL-C<70mg/dl) or moderate lipid-lowering therapy (Group B; n=60: target LDL-C<100mg/dl). The ratio symptomatic/asymptomatic patients